



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 343355-600020

Group Art Unit: 2167)
Examiner: H. Dodds)
First Named Inventor: R. Chu)
Serial No.: 09/766,789)
Filed: January 22, 2001)
For: Computer-Implemented)
Dimension Engine)

**PRE-APPEAL BRIEF
CONFERENCE REQUEST**

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on Nov. 14, 2005.

By 

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The Assignee hereby requests review of the Final Rejection of the above-captioned application prior to filing an appeal brief for the reasons set forth below. The Assignee submits that the Final Rejection is based upon clear errors in fact.

REASONS FOR PRE-APPEAL CONFERENCE REQUEST

PROSECUTION SUMMARY

Claims 1-5, 7-38 and 40-63 stand rejected by the Examiner. Dependent claims 6 and 39 were indicated as allowable. More specifically, independent claims 1 and 34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sang'udi et al. (U.S. Patent No. 6,480,194) and Anwar (U.S. Patent No. 6,750,864). Claim 63 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Anwar, Sang'udi, and Thomas (U.S. Patent No. 6,490,719).

The Assignee traversed these rejections in a Responsive Amendment filed dated October 11, 2005. For example, Assignee showed that none of the cited references, either alone or in combination, disclose a decision tree process module that automatically determines a subset of dimension variables, as required in independent claim 1.

In an Advisory Action dated November 3, 2005, the Examiner found these arguments unpersuasive. In the Advisory Action, the Examiner stated:

... Anwar teaches ... the decision tree processing module... “automatically determines the subset of the dimension variables” at col. 26, lines 63-65, col. 44, lines 31-34, and col. 36, lines 19-23

Assignee respectfully disagrees with the Examiner's positions. Accordingly, Assignee has filed this paper with the United States Patent Office.

IN CLEAR ERROR, THE PENDING CLAIMS ARE PATENTABLE OVER THE CITED REFERENCES

The Examiner's interpretation of “wherein the decision tree processing module automatically determines the subset of the dimension variables” constitutes clear error. Claim 1 is directed to a multi-dimension data analysis apparatus through use of a decision tree processing module. Claim 1 contains a computer data store that stores input data. The input data has multiple dimension variables and at least one target variable. As a non-limiting example, an input data set may contain large data sets that are associated with many dimension variables, such as those shown in Figure 2 of assignee's application (e.g.,

a marital dimension variable, gender dimension variable, a single mom dimension variable, etc.). The data sets could be so large as to have in some situations hundreds of dimension variables whose values are stored in the data store.

Claim 1 recites that a decision tree processing module automatically determines a subset of the dimension variables for splitting the input data. Through a decision tree processing approach, the splitting by the dimension variable subset can be used to predict the target variable. As shown in Figure 2 as a non-limiting example, five dimension variables have been automatically selected from the original large set of dimension variables for use as splitting the input data in order to predict a target variable.

The Advisory Action asserts that the Anwar reference teaches that a decision tree process module automatically determines the subset of dimension variables (as required by claim 1) at col. 26, lines 63-65, col. 44, lines 31-34, and col. 36, lines 19-23.

[(1)] Next, ACTG will evaluate all valid combinations automatically to determine the best cross-tab construct to present to the user. (At col. 26, lines 63-65.)

[(2)] In order to extract useful information (subsets of training data, statistical indices or the like) from a training set, the DMT has to perform data processing which is related to OLAP tasks. (At col. 44, lines 31-34.)

[(3)] The user can add dependent variables by grabbing a variable (dimension or member) from a list and drag-n-drop the new variable into the cross-tab wherever desire and the cross-tab control will add the dropped in variable to the cross-tab. The user can remove and dependent variable by simply grabbing the variable in a cross-tab and dropping outside the cross-tab. (At col. 36, lines 19-23.)

Assignee disagrees that the excerpts disclose automatically determining the subset of dimension variables as required by claim 1, let alone disclose that a decision tree processing module performs such an automatic determination of the subset of dimension variables. As an illustration, excerpt #1 may be discussing an automatic determination, but it is in the context of what is the best **cross-tab construct** to present to the user, and not to automatically determine through a *decision tree* approach a subset of dimension variables as required in claim 1. A cross-tab construct is significantly different from the decision tree subject matter of claim 1. To illustrate this, assignee notes that the Anwar reference itself

mentions that “The term ‘cross-tab’ is a 2D view of an n-dimensional matrix.” (See col. 5, lines 36-37 of Anwar). Thus the automatic generation of a cross-tab construct as defined by the Anwar reference involves significantly different subject matter from claim 1’s subject matter which involves generation of a subset of dimension variables through a decision tree approach.

Excerpt #2 of Anwar does not disclose any automatic determination, let alone an automatic determination of the subset of dimension variables of claim 1. Rather excerpt #2 of Anwar is only disclosing that training sets are difficult for OLAP databases and how to extract useful information from a training set.

Excerpt #3 of Anwar also does not disclose any automatic determination, let alone an automatic determination of the subset of dimension variables of claim 1. In fact this excerpt further evidences the manual approach of Anwar by disclosing

[(3)] The **user** can add dependent variables by **grabbing** a variable (dimension or member) from a list and **drag-n-drop** the new variable into the cross-tab wherever desire and the cross-tab control will add the dropped in variable to the cross-tab. The **user** can remove and dependent variable by **simply grabbing** the variable in a cross-tab and **dropping** outside the cross-tab. (At col. 36, lines 19-23; Emphasis added).

In excerpt #3, the **user** is performing manual actions, such as **grabbing**, **dropping**, and **drag-n-drop** actions.

As shown in the analysis of the cited excerpts of Anwar, Anwar does not disclose the limitations of claim 1, such as a decision tree process module that automatically determines the subset of dimension variables as required by claim 1 in combination with its other limitations. Because of such differences, Anwar (whether considered alone or in combination with the other cited references) does not render claim 1 obvious and thus claim 1 is allowable and should proceed to issuance.

Claim 34 is directed to a computer-implemented multi-dimension data analysis method. Claim 34 recites in combination with its other limitations that a subset of the dimension variables is automatically determined. Because the cited references (whether viewed alone or in combination) do not teach, disclose or suggest such limitations of claim 34, claim 34 and its dependent claims are allowable.

Claim 63 is directed to a computer-implemented method for multi-dimension data analysis by a non-technical individual. Claim 63 recites in combination with its other limitations that a subset of the dimension variables is automatically determined. Because the cited references (whether viewed alone or in combination) do not teach, disclose or suggest such limitations, claim 63 is allowable.

For the above reasons, Applicant respectfully submits that the pending claims are allowable, and requests the withdrawal of the rejections.

Respectfully submitted,

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